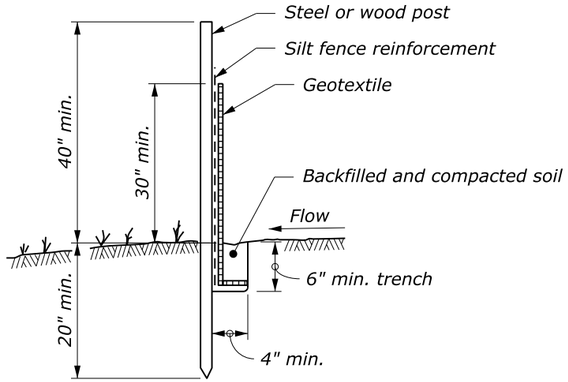
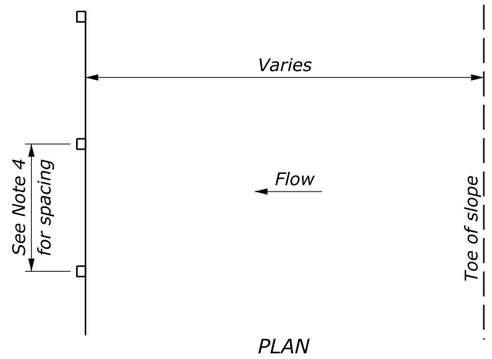
PROJECT	SHEET NUMBER



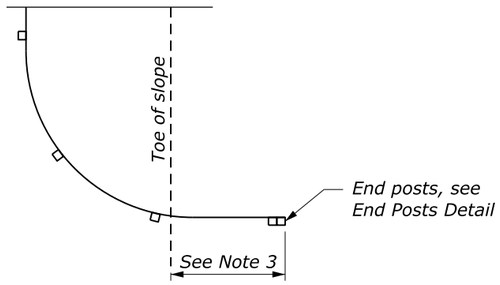
POST AND GEOTEXTILE INSTALLATION DETAIL



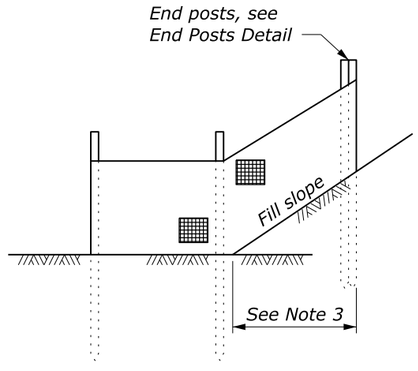
PLAN

NOTE:

1. *Alternate preassembled silt fence options will be allowed as long as specified dimensions are satisfied. Follow manufacturer's recommendations for installation procedures. All types must ensure silt fence remains attached to, and does not slide down, supporting posts.*
2. *Install silt fence to follow the ground contours as closely as possible.*
3. *Curve ends of silt fence upgrade to prevent water from running around the ends.*
4. *10-foot maximum spacing with silt fence reinforcement. 6-foot maximum spacing without silt fence reinforcement.*

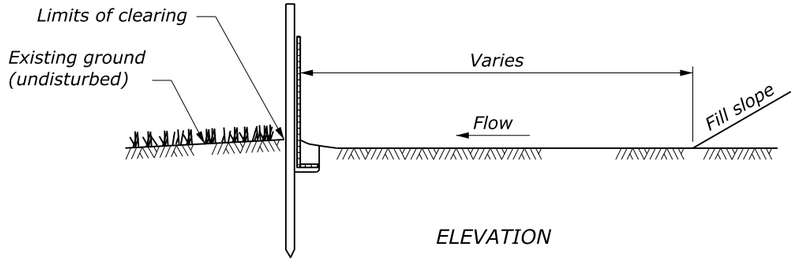


PLAN



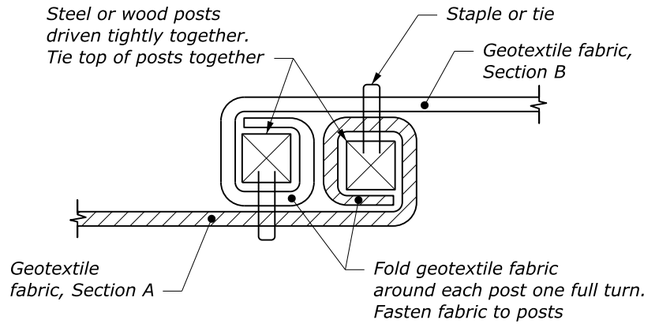
ELEVATION

END DETAIL



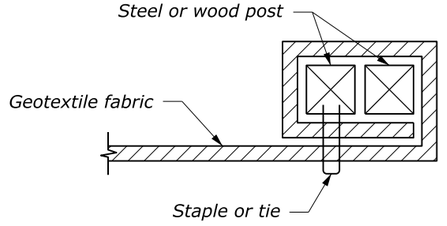
ELEVATION

SILT FENCE INSTALLATION AT TOE OF FILL



PLAN

POSTS AT JOINTS



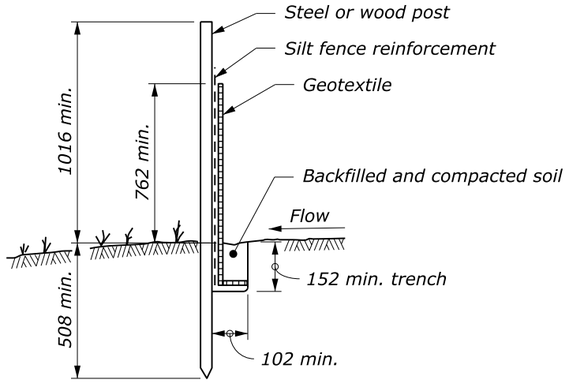
PLAN

END POSTS DETAIL

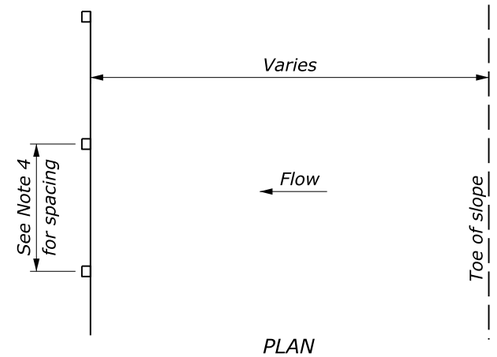
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-1
SILT FENCE	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 10/2016

PROJECT	SHEET NUMBER



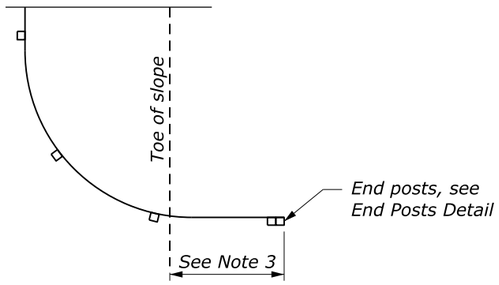
POST AND GEOTEXTILE INSTALLATION DETAIL



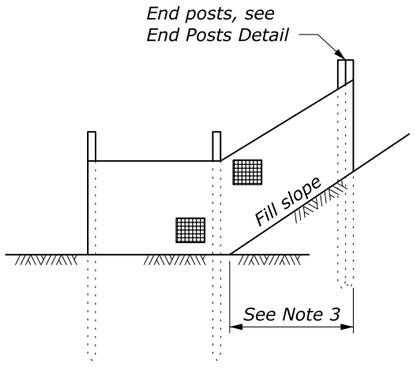
PLAN

NOTE:

1. *Alternate preassembled silt fence options will be allowed as long as specified dimensions are satisfied. Follow manufacturer's recommendations for installation procedures. All types must ensure silt fence remains attached to, and does not slide down, supporting posts.*
2. *Install silt fence to follow the ground contours as closely as possible.*
3. *Curve ends of silt fence upgrade to prevent water from running around the ends.*
4. *3-meters maximum spacing with silt fence reinforcement. 1.8-meters maximum spacing without silt fence reinforcement.*

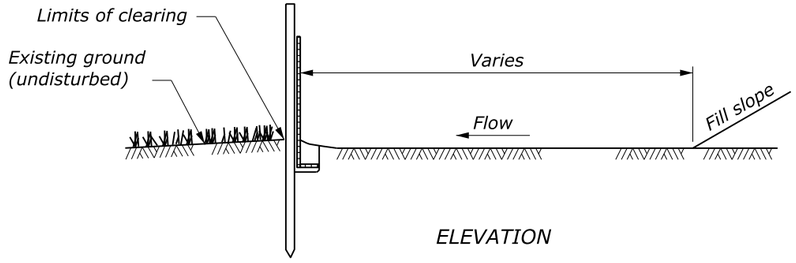


PLAN



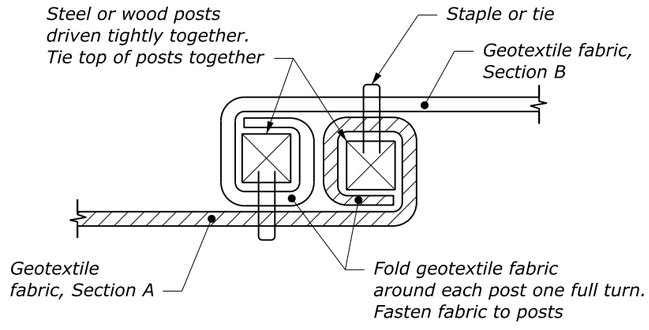
ELEVATION

END DETAIL



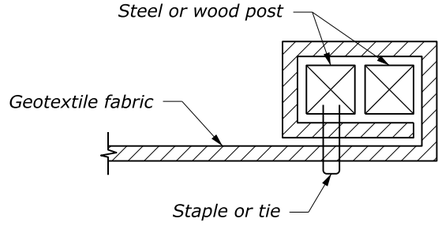
ELEVATION

SILT FENCE INSTALLATION AT TOE OF FILL



PLAN

POSTS AT JOINTS



PLAN

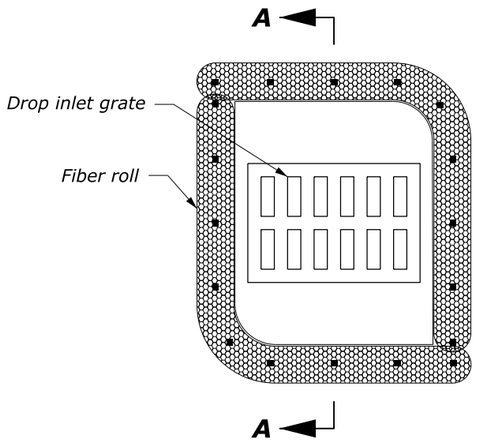
END POSTS DETAIL

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

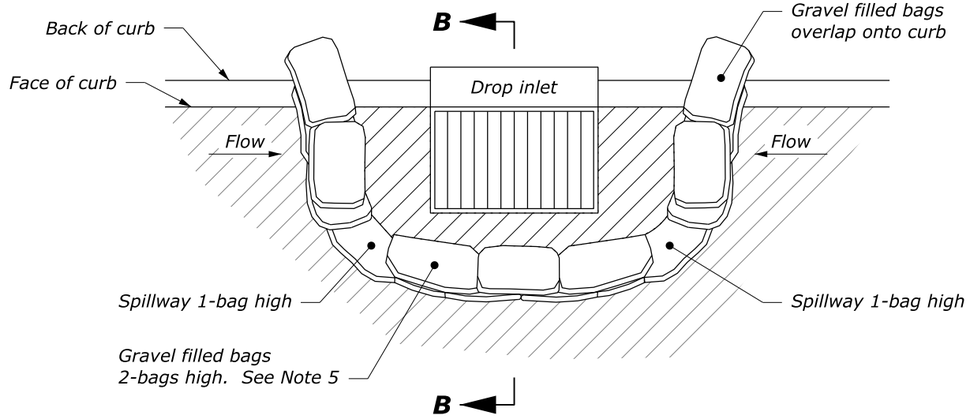
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD WM157-1
SILT FENCE	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 10/2016

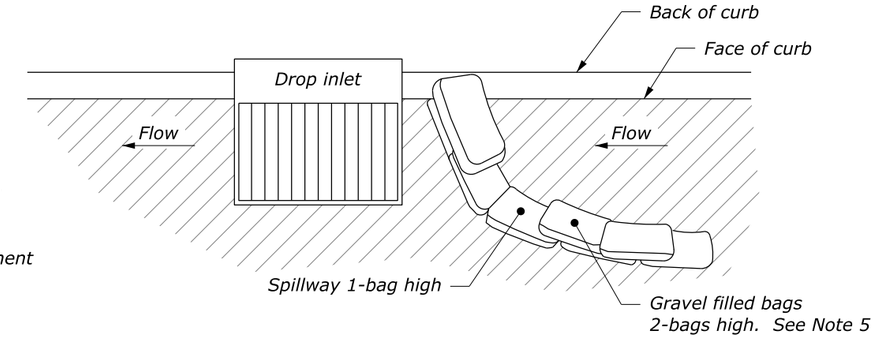
PROJECT	SHEET NUMBER



PLAN



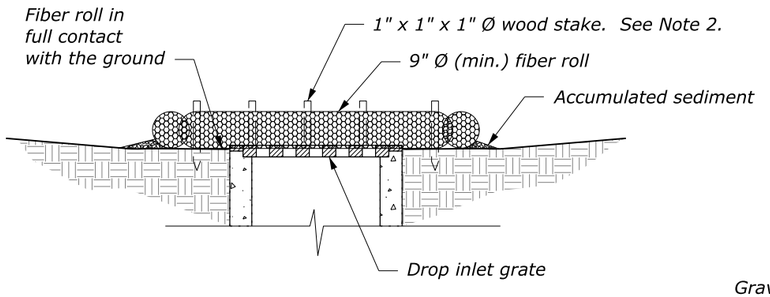
PLAN VIEW - INLET AT SAG



PLAN VIEW - INLET ON GRADE

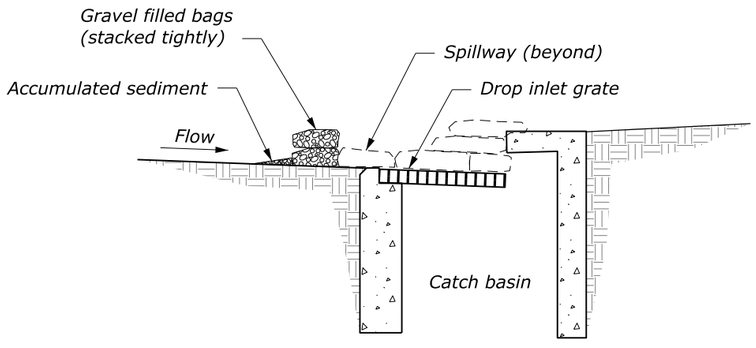
NOTE:

1. *Select the inlet protection device to fit field conditions as approved.*
2. *Install fiber rolls with stakes spaced no more than 24-inches on center. Drive stakes 12-inches (min.) in undisturbed soil.*
3. *Approximate finished dimension of gravel bags is 12-inches x 18-inches.*
4. *Maximum top of gravel bag spillway elevation = Top of curve minus 1-inch.*
5. *Pack gravel filled bags tightly together end to end to ensure no sediment flows between or underneath the bags. Where tight fit is unachievable, install geotextile filter, class 2, type C along the upstream face of the bags. Place fabric over the top of the bags to the spillway elevation. Anchor the fabric by placing the next layer of bags on top of it. Extend the geotextile fabric a minimum of 18-inches upstream of the bags. Cover geotextile fabric to the top of the fabric with clean, silt-free coarse aggregate between 2 and 3-inches in diameter.*
6. *Size the prefabricated filter insert (Type C) to fit the drop inlet and allow collected material removal without spillage. Include a high-flow bypass in the insert.*



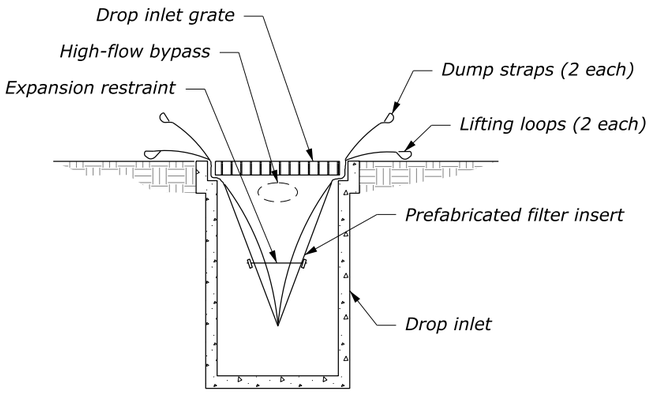
SECTION A-A

FIBER ROLL
DROP INLET PROTECTION (TYPE A)



SECTION B-B

GRAVEL BAG BERM
DROP INLET PROTECTION (TYPE B)



PREFABRICATED FILTER INSERT
DROP INLET PROTECTION (TYPE C)
See Note 6

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

TEMPORARY INLET PROTECTION
Sheet 1 of 2

WFL STANDARD
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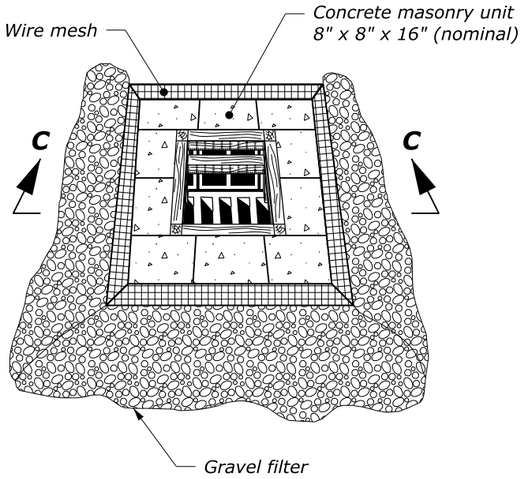
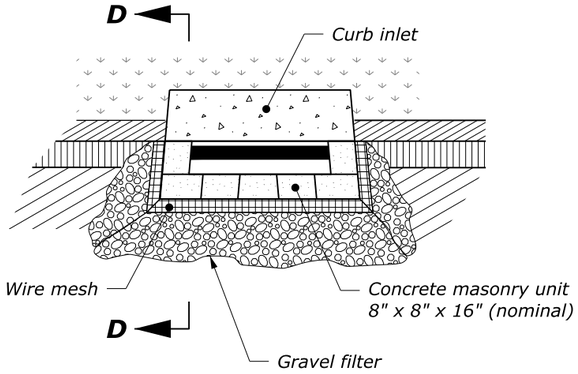
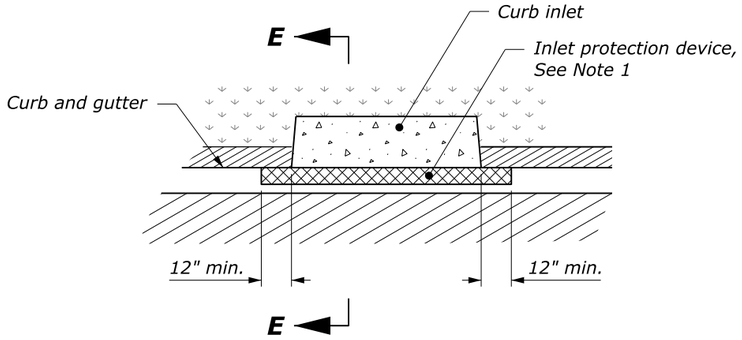


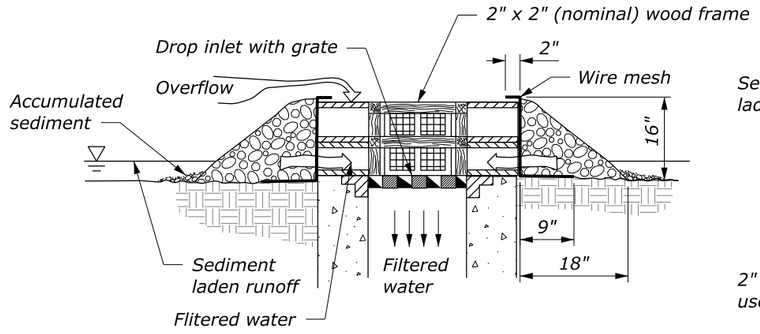


NOTE:

1. *Inlet protection device (type E) may consist of continuous filter tubing filled with gravel or other prefabricated filter material. Install device according to manufacturer's recommendations.*
2. *Vary dimensions to fit field conditions.*

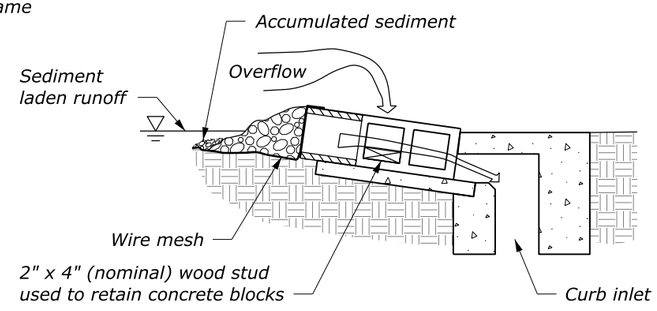


PLAN



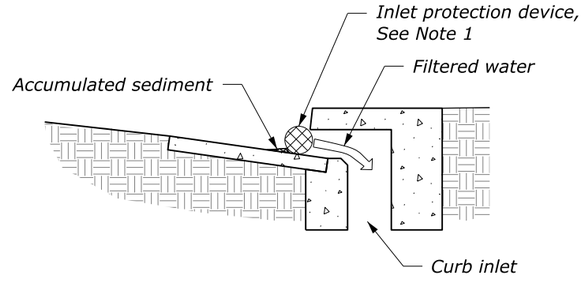
SECTION C-C

BLOCK AND GRAVEL
DROP INLET PROTECTION (TYPE D1)



SECTION D-D

BLOCK AND GRAVEL
CURB INLET PROTECTION (TYPE D2)



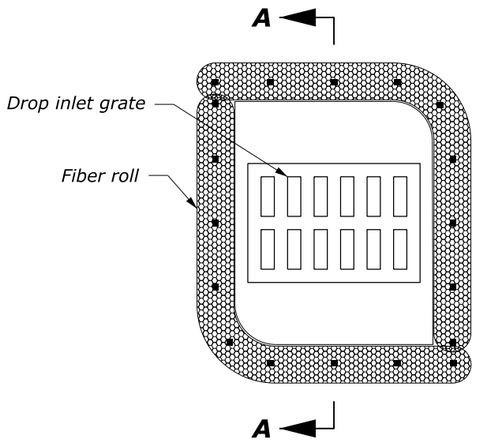
SECTION E-E

INLET PROTECTION DEVICE
CURB INLET PROTECTION (TYPE E)

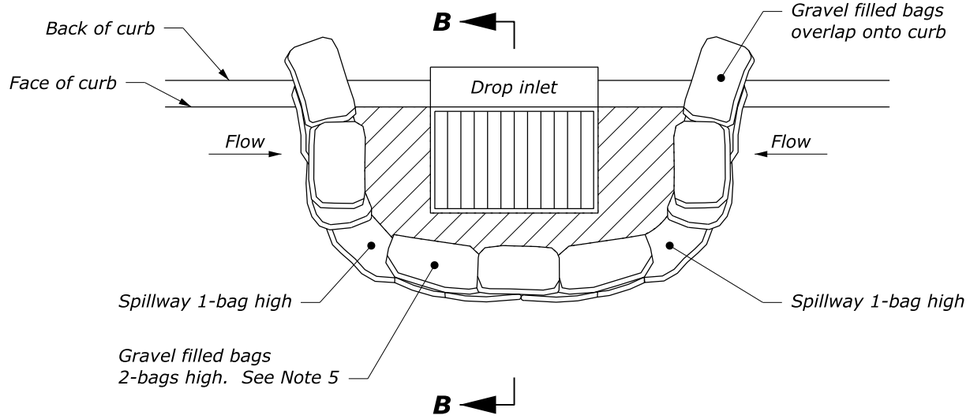
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-2
TEMPORARY INLET PROTECTION Sheet 2 of 2	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 7/2016

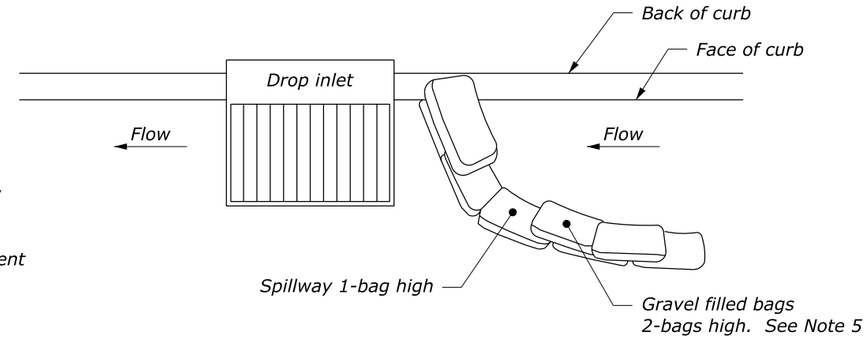
PROJECT	SHEET NUMBER



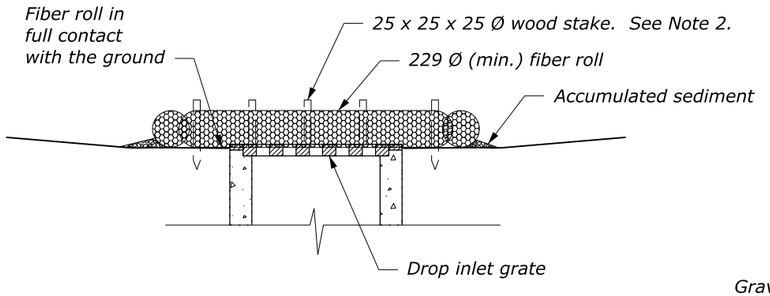
PLAN



PLAN VIEW - INLET AT SAG

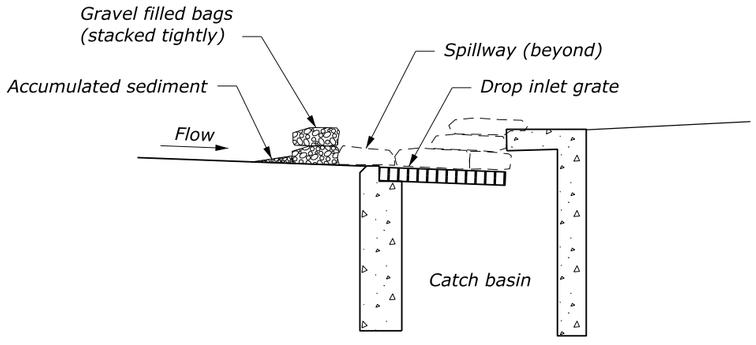


PLAN VIEW - INLET ON GRADE



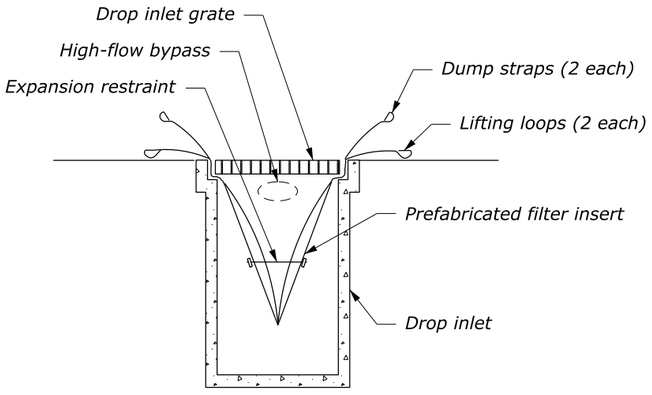
SECTION A-A

FIBER ROLL
DROP INLET PROTECTION (TYPE A)



SECTION B-B

GRAVEL BAG BERM
DROP INLET PROTECTION (TYPE B)



PREFABRICATED FILTER INSERT
DROP INLET PROTECTION (TYPE C)
See Note 6

NOTE:

1. Select the inlet protection device to fit field conditions as approved.
2. Install fiber rolls with stakes spaced no more than 610 mm on center. Drive stakes 305 mm (min.) in undisturbed soil.
3. Approximate finished dimension of gravel bags is 305 mm x 457 mm.
4. Maximum top of gravel bag spillway elevation = Top of curve minus 25 mm.
5. Pack gravel filled bags tightly together end to end to ensure no sediment flows between or underneath the bags. Where tight fit is unachievable, install geotextile filter, class 2, type C along the upstream face of the bags. Place fabric over the top of the bags to the spillway elevation. Anchor the fabric by placing the next layer of bags on top of it. Extend the geotextile fabric a minimum of 457 mm upstream of the bags. Cover geotextile fabric to the top of the fabric with clean, silt-free coarse aggregate between 51 and 76 mm in diameter.
6. Size the prefabricated filter insert (Type C) to fit the drop inlet and allow collected material removal without spillage. Include a high-flow bypass in the insert.

This drawing contains **Metric** units of measure.
Dimensions without units are millimeters.

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

TEMPORARY INLET PROTECTION
Sheet 1 of 2

WFL STANDARD
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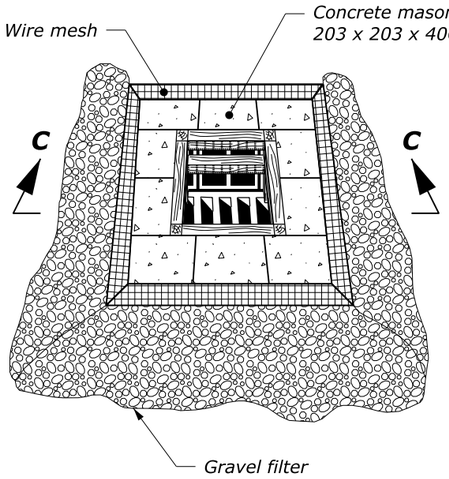
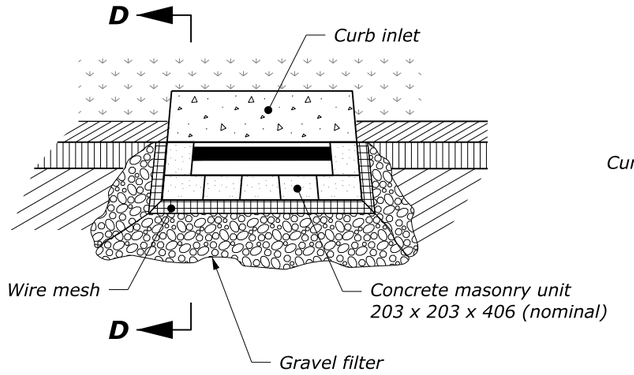
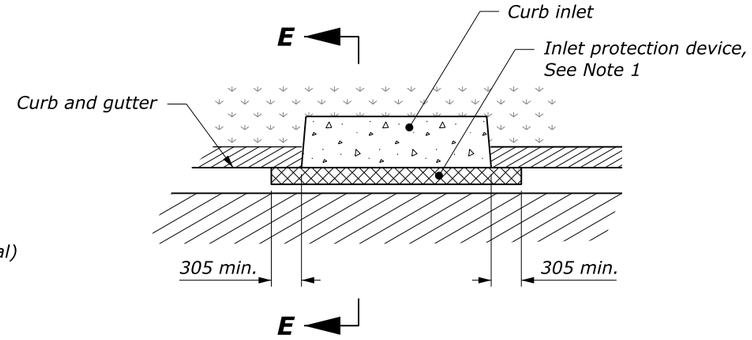
PROJECT	SHEET NUMBER



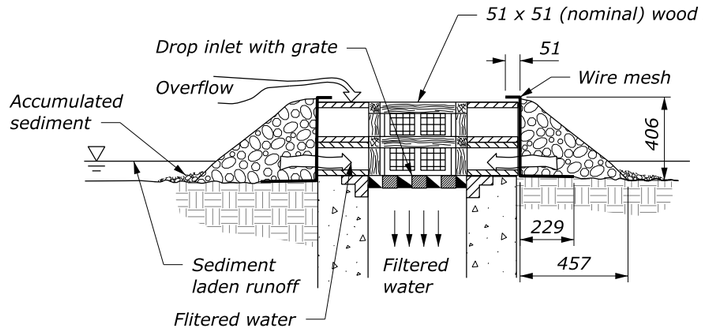


NOTE:

1. *Inlet protection device (type E) may consist of continuous filter tubing filled with gravel or other prefabricated filter material. Install device according to manufacturer's recommendations.*
2. *Vary dimensions to fit field conditions.*

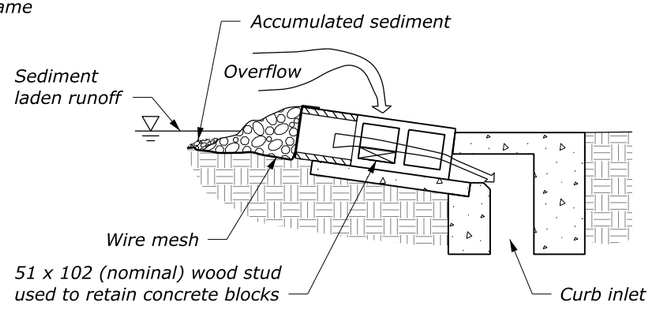


PLAN



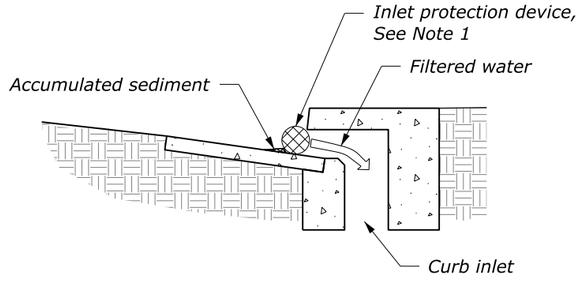
SECTION C-C

BLOCK AND GRAVEL
DROP INLET PROTECTION (TYPE D1)



SECTION D-D

BLOCK AND GRAVEL
CURB INLET PROTECTION (TYPE D2)



SECTION E-E

INLET PROTECTION DEVICE
CURB INLET PROTECTION (TYPE E)

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

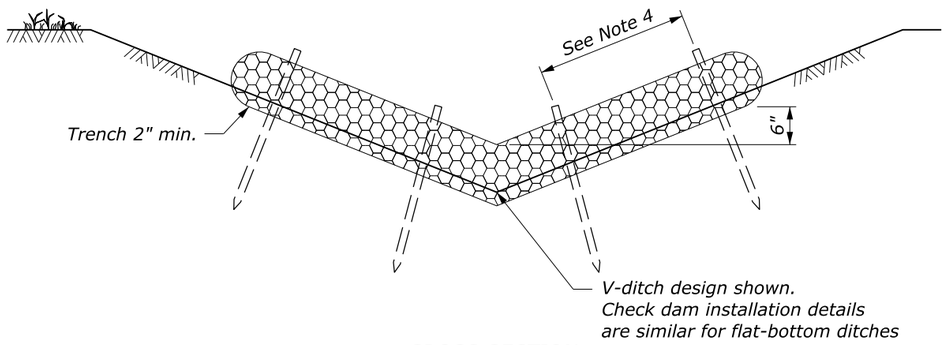
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

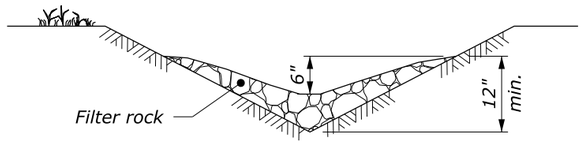
TEMPORARY INLET PROTECTION
Sheet 2 of 2

WFL STANDARD
WM157-2
SPECIFICATION
FP-24, FP-14
APPROVED FOR USE
7/2016

PROJECT	SHEET NUMBER



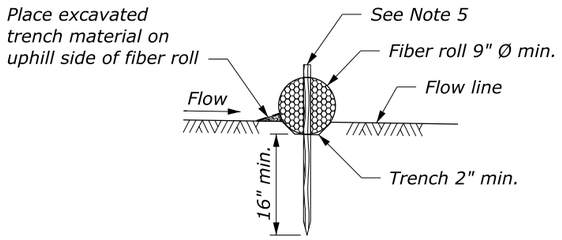
CROSS SECTION



V-DITCH
CROSS SECTION

NOTE:

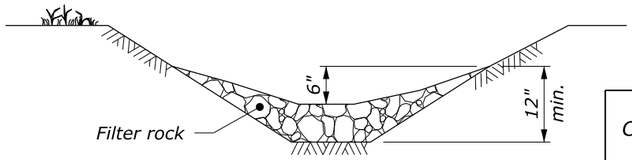
1. Construct check dams from fiber rolls, filter rock, or gravel bags as approved, to meet the functional requirements of the check dam device.
2. Repair all rills or gullies and properly compact prior to installation.
3. Install check dams in ditches perpendicular to the flowline.
4. Stake fiber rolls in place with 1⅛-inch x 1⅛-inch wood stakes. Drive stakes at each end of the fiber roll and at 2-foot maximum spacing.
5. Drive stakes into undisturbed soil of trench bottom. Expose stakes 2-inches minimum above top of fiber roll.
6. Provide sufficient length to prevent water from flowing around the ends of the fiber roll.
7. Adjust check dam spacing based on site-specific conditions.



FIBER ROLL
STAKING DETAIL

FIBER ROLL CHECK DAM SPACING* (See Note 7)	
DITCH GRADE	CHECK DAM SPACING (max.) (FT)
2%	150
3%	100
4%	80
5%	60

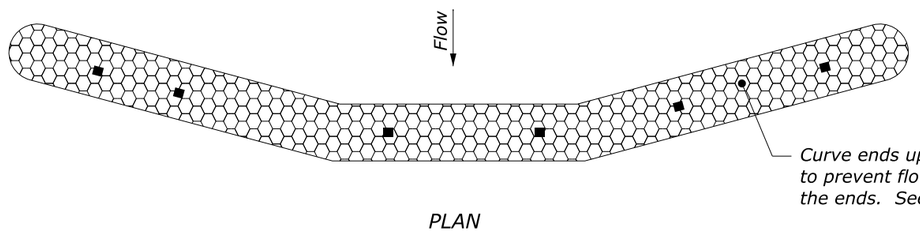
* Spacing calculated based on 9" Ø minimum fiber roll. Do not use fiber roll check dams on ditch grades steeper than 5%.



FLAT-BOTTOM DTICH
CROSS SECTION

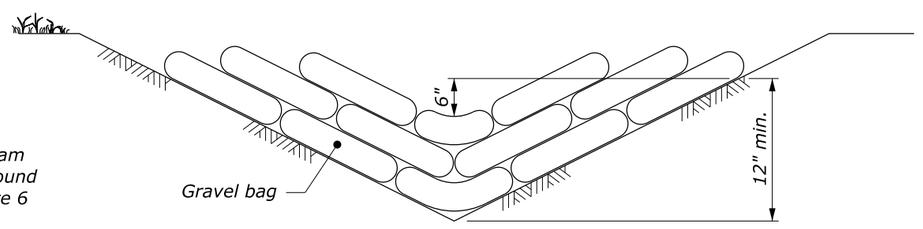
FILTER ROCK CHECK DAM SPACING (See Note 7)	
DITCH GRADE	CHECK DAM SPACING (max.) (FT)
2%	150
3%	100
4%	80
5%	60
6%	50

FILTER ROCK CHECK DAM



PLAN

FIBER ROLL CHECK DAM



CROSS SECTION

GRAVEL BAG CHECK DAM

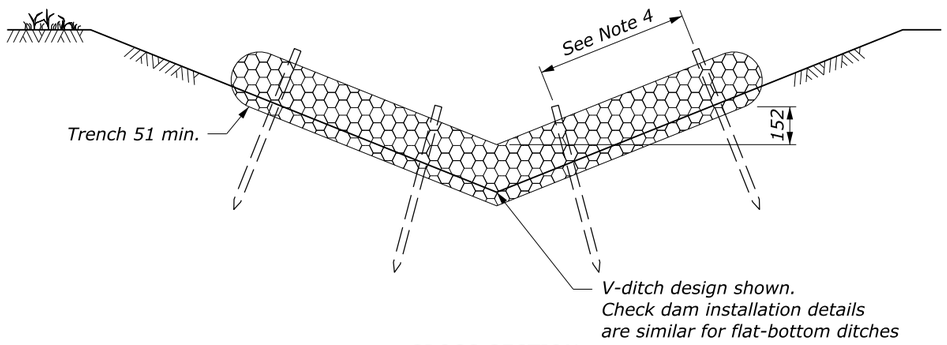
GRAVEL BAG CHECK DAM SPACING** (See Note 7)	
DITCH GRADE	CHECK DAM SPACING (max.) (FT)
2%	150
3%	100
4%	80
5%	60
6%	50

** Do not use gravel bag check dams on ditch grades steeper than 6%.

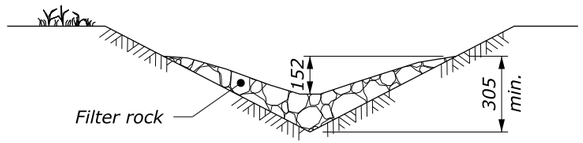
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-15
CHECK DAM MODERATE GRADES	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 7/2016

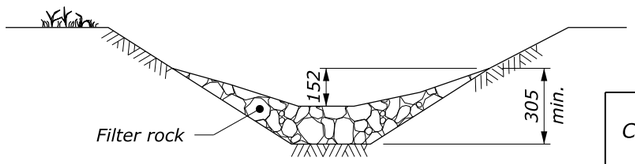
PROJECT	SHEET NUMBER



CROSS SECTION



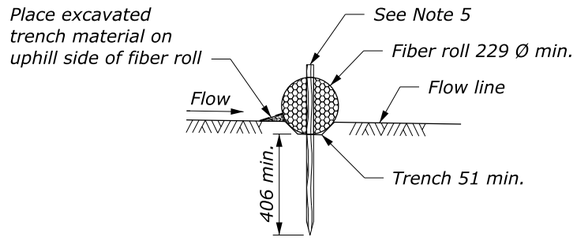
V-DITCH
CROSS SECTION



FLAT-BOTTOM DTICH
CROSS SECTION

NOTE:

1. Construct check dams from fiber rolls, filter rock, or gravel bags as approved, to meet the functional requirements of the check dam device.
2. Repair all rills or gullies and properly compact prior to installation.
3. Install check dams in ditches perpendicular to the flowline.
4. Stake fiber rolls in place with 29 mm x 29 mm wood stakes. Drive stakes at each end of the fiber roll and at 610 mm maximum spacing.
5. Drive stakes into undisturbed soil of trench bottom. Expose stakes 51 mm minimum above top of fiber roll.
6. Provide sufficient length to prevent water from flowing around the ends of the fiber roll.
7. Adjust check dam spacing based on site-specific conditions.



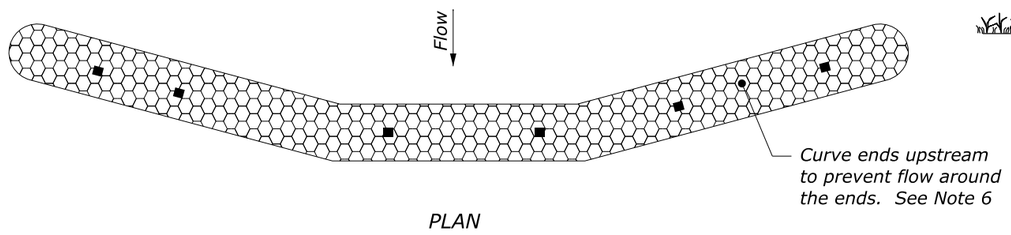
FIBER ROLL
STAKING DETAIL

FIBER ROLL CHECK DAM SPACING* (See Note 7)	
DITCH GRADE	CHECK DAM SPACING (max.) (m)
2%	46
3%	30
4%	24
5%	18

* Spacing calculated based on 229 mm Ø minimum fiber roll. Do not use fiber roll check dams on ditch grades steeper than 5%.

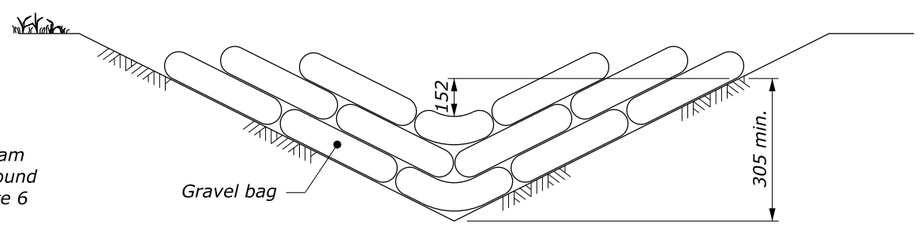
FILTER ROCK CHECK DAM SPACING (See Note 7)	
DITCH GRADE	CHECK DAM SPACING (max.) (m)
2%	46
3%	30
4%	24
5%	18
6%	15

FILTER ROCK CHECK DAM



PLAN

FIBER ROLL CHECK DAM



CROSS SECTION

GRAVEL BAG CHECK DAM SPACING** (See Note 7)	
DITCH GRADE	CHECK DAM SPACING (max.) (m)
2%	46
3%	30
4%	24
5%	18
6%	15

** Do not use gravel bag check dams on ditch grades steeper than 6%.

GRAVEL BAG CHECK DAM

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

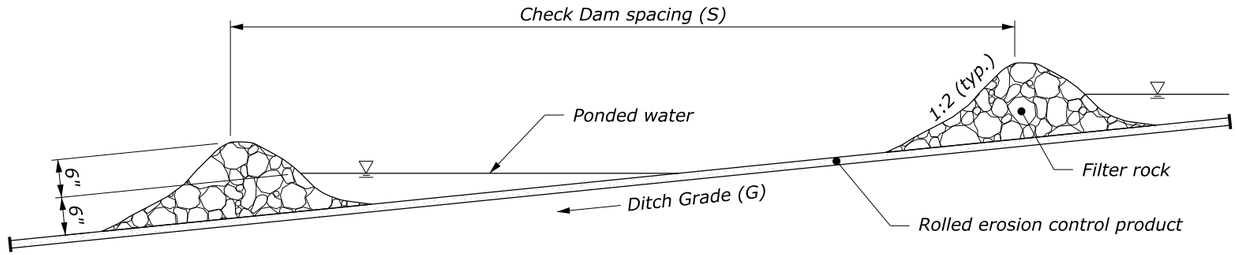
CHECK DAM MODERATE GRADES

WFL STANDARD	WM157-15
SPECIFICATION	FP-24, FP-14
APPROVED FOR USE	7/2016

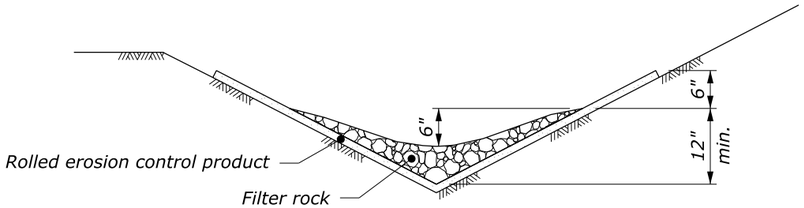
PROJECT	SHEET NUMBER

NOTE:

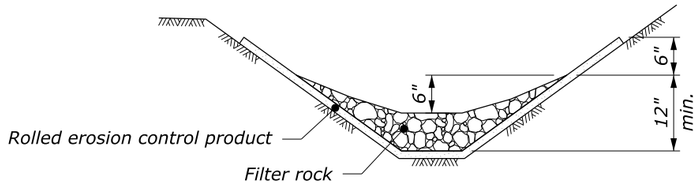
1. *Repair all rills or gullies and properly compact prior to installation.*
2. *Install check dams in ditches perpendicular to the flowline.*
3. *Adjust check dam spacing based on site-specific conditions.*



PROFILE VIEW



CROSS SECTION
V-DITCH



CROSS SECTION
FLAT-BOTTOM DITCH

FILTER ROCK CHECK DAM SPACING (See Note 3)	
DITCH GRADE (G)	*MAX. CHECK DAM SPACING (S) (FT)*
7%	*40*
8% and 9%	*30*
≥10%	*20*

FILTER ROCK CHECK DAM WITH ROLLED EROSION CONTROL PRODUCT

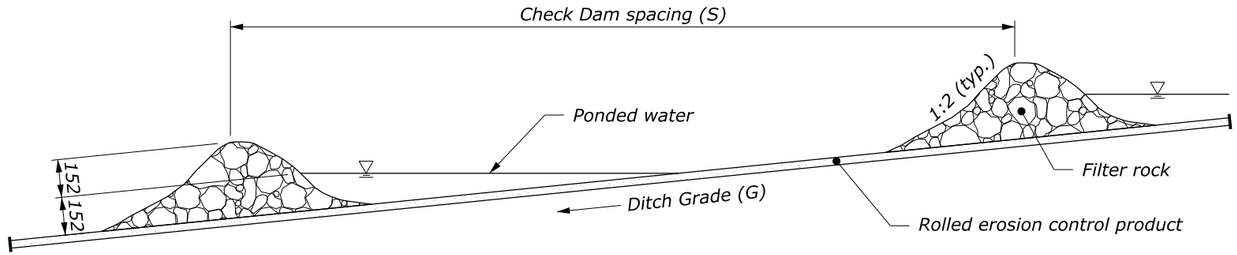
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-16
CHECK DAM WITH ROLLED EROSION CONTROL PRODUCT	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 7/2016

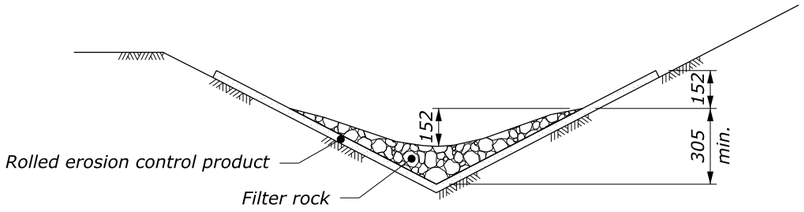
PROJECT	SHEET NUMBER

NOTE:

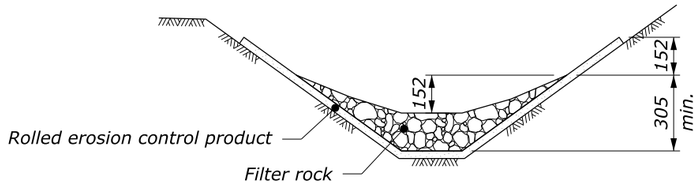
1. *Repair all rills or gullies and properly compact prior to installation.*
2. *Install check dams in ditches perpendicular to the flowline.*
3. *Adjust check dam spacing based on site-specific conditions.*



PROFILE VIEW



CROSS SECTION
V-DITCH



CROSS SECTION
FLAT-BOTTOM DITCH

FILTER ROCK CHECK DAM SPACING (See Note 3)	
DITCH GRADE (G)	*MAX. CHECK DAM SPACING (S) (m)*
7%	*12*
8% and 9%	*9*
≥10%	*6*

FILTER ROCK CHECK DAM WITH ROLLED EROSION CONTROL PRODUCT

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

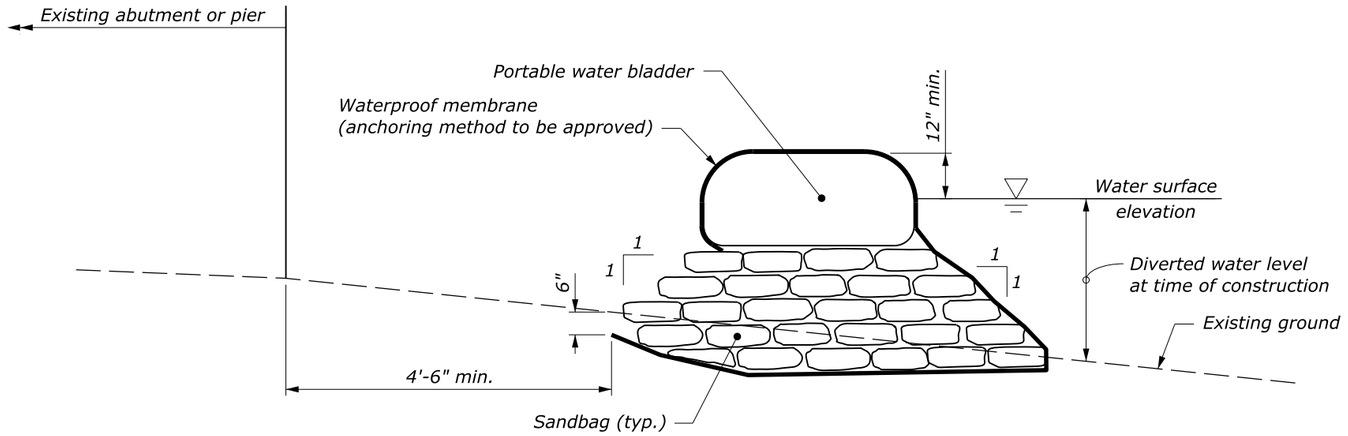
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

CHECK DAM WITH ROLLED EROSION CONTROL PRODUCT

WFL STANDARD	WM157-16
SPECIFICATION	FP-24, FP-14
APPROVED FOR USE	7/2016

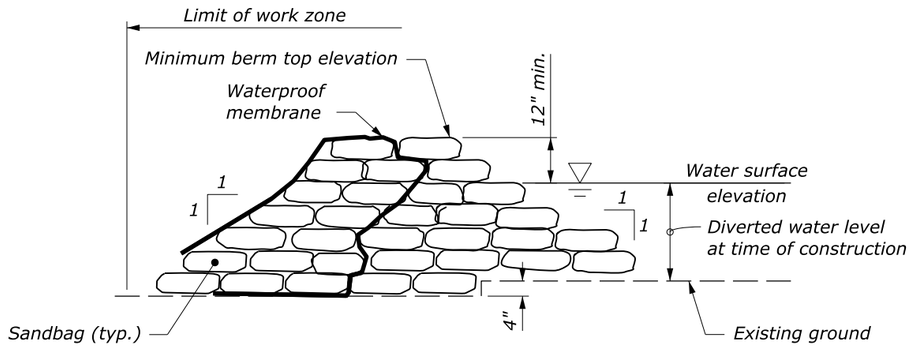
PROJECT	SHEET NUMBER



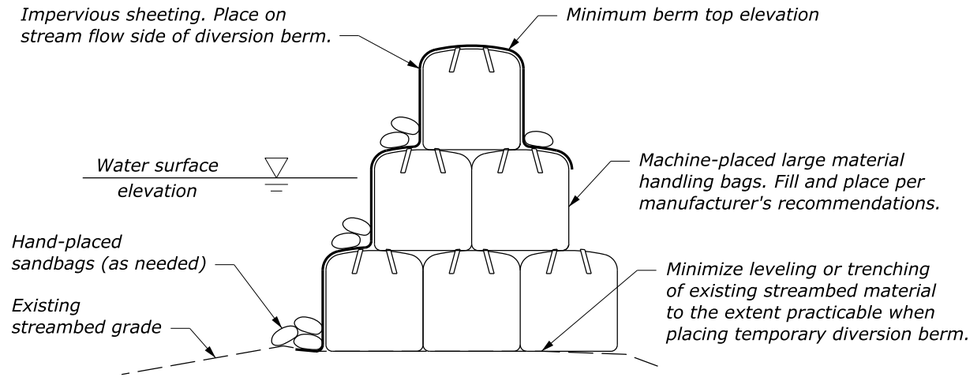
OPTION A

NOTE:

1. *Provide a temporary diversion berm with a minimum height equal to the water surface elevation with at least 12 inches freeboard. The examples shown are intended as representative guidance. Submit temporary stream diversion plans for approval, including alternate methods, prior to installation.*
2. *Place sandbags to form a pyramid by laying equal numbers of bottom rows as there are vertical course. Overlap the upper rows of sandbags above the joints in lower rows.*
3. *Place a maximum of one diversion in the stream at any given time.*
4. *Inspect and maintain the temporary diversion berm daily. Repair as needed after rainfall events or as directed.*
5. *Use as needed when constructing the isolation barrier as directed.*



OPTION B

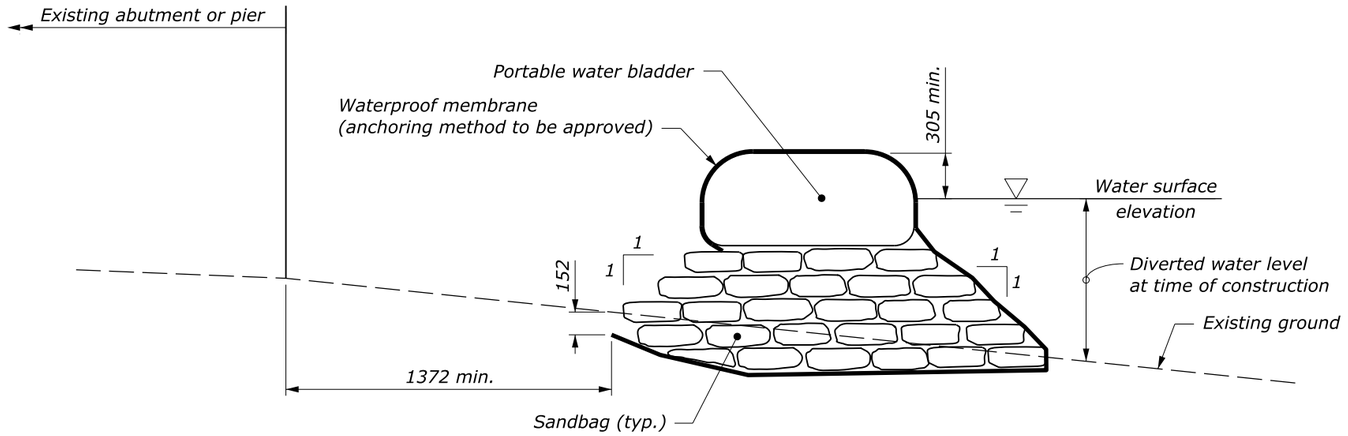


OPTION C

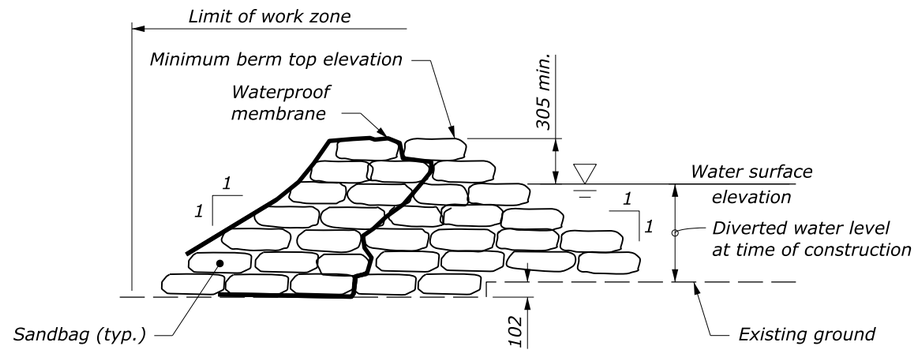
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-17
TEMPORARY DIVERSION BERM METHODS	SPECIFICATION FP-14
	APPROVED FOR USE 6/2025

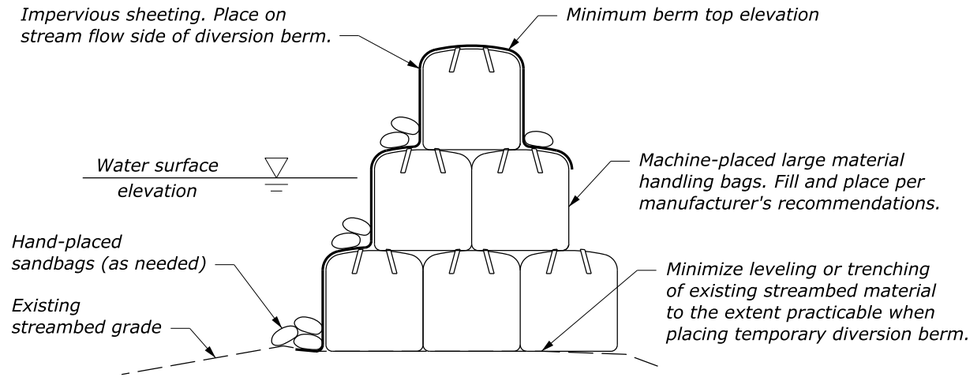
PROJECT	SHEET NUMBER



OPTION A



OPTION B



OPTION C

NOTE:

1. *Provide a temporary diversion berm with a minimum height equal to the water surface elevation with at least 305 mm freeboard. The examples shown are intended as representative guidance. Submit temporary stream diversion plans for approval, including alternate methods, prior to installation.*
2. *Place sandbags to form a pyramid by laying equal numbers of bottom rows as there are vertical course. Overlap the upper rows of sandbags above the joints in lower rows.*
3. *Place a maximum of one diversion in the stream at any given time.*
4. *Inspect and maintain the temporary diversion berm daily. Repair as needed after rainfall events or as directed.*
5. *Use as needed when constructing the isolation barrier as directed.*

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

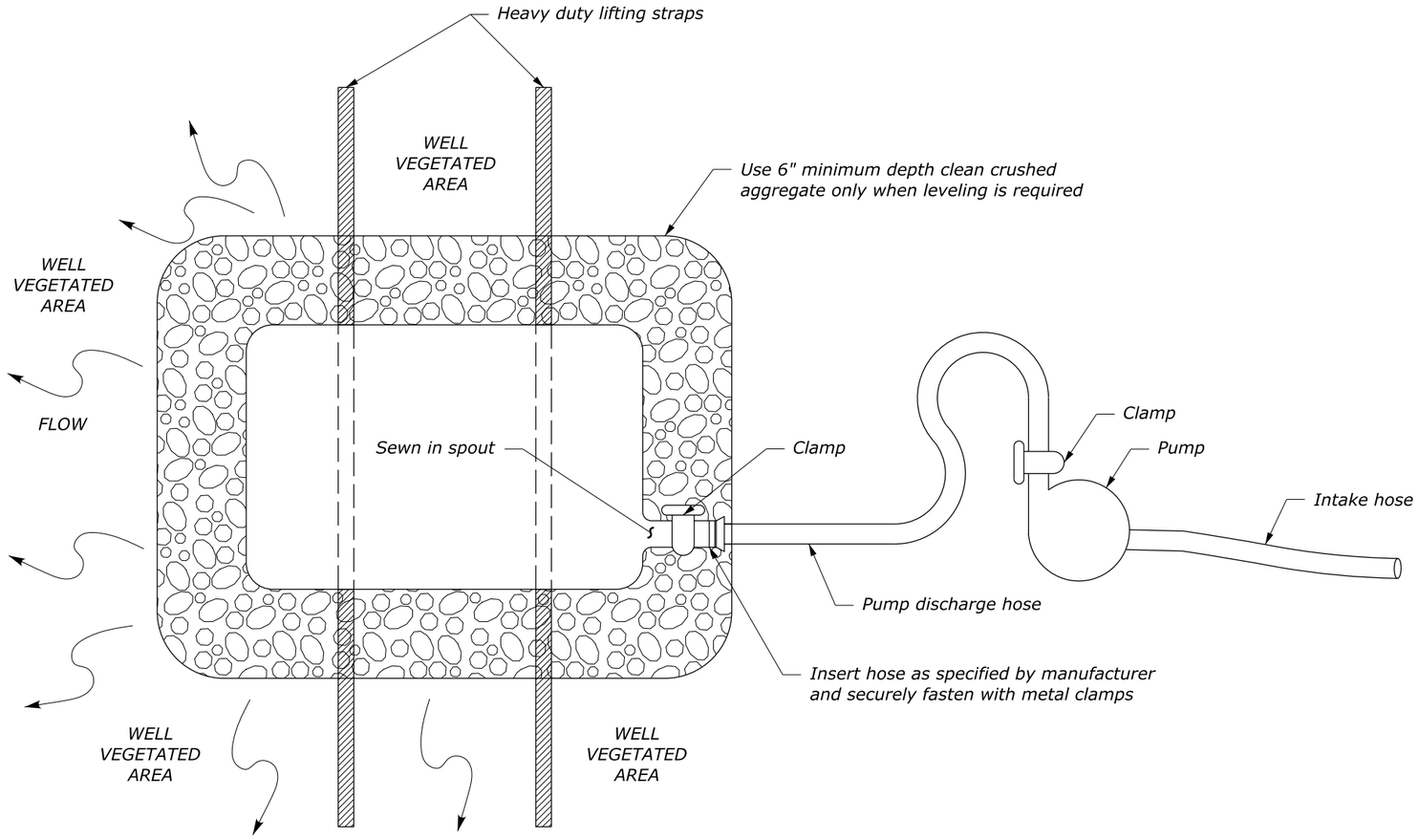
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

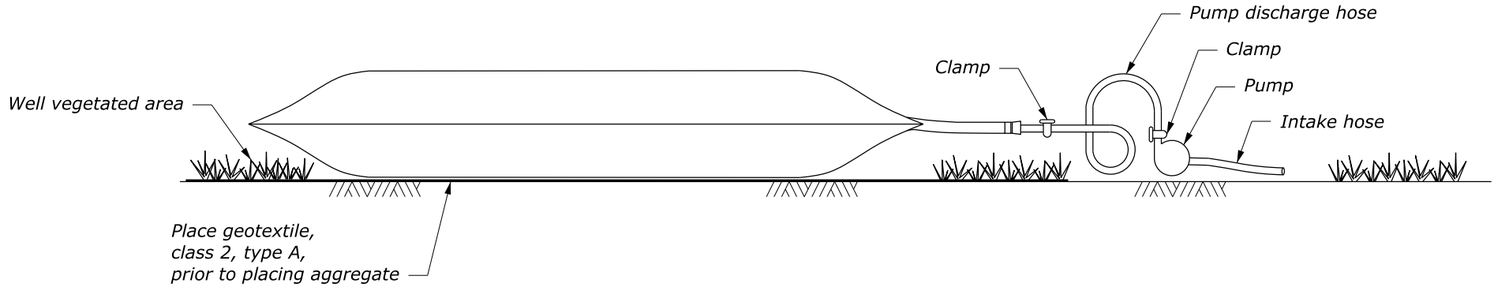
TEMPORARY DIVERSION BERM METHODS

WFL STANDARD
WM157-17
SPECIFICATION
FP-14
APPROVED FOR USE
6/2025

PROJECT	SHEET NUMBER



PLAN VIEW



ELEVATION VIEW

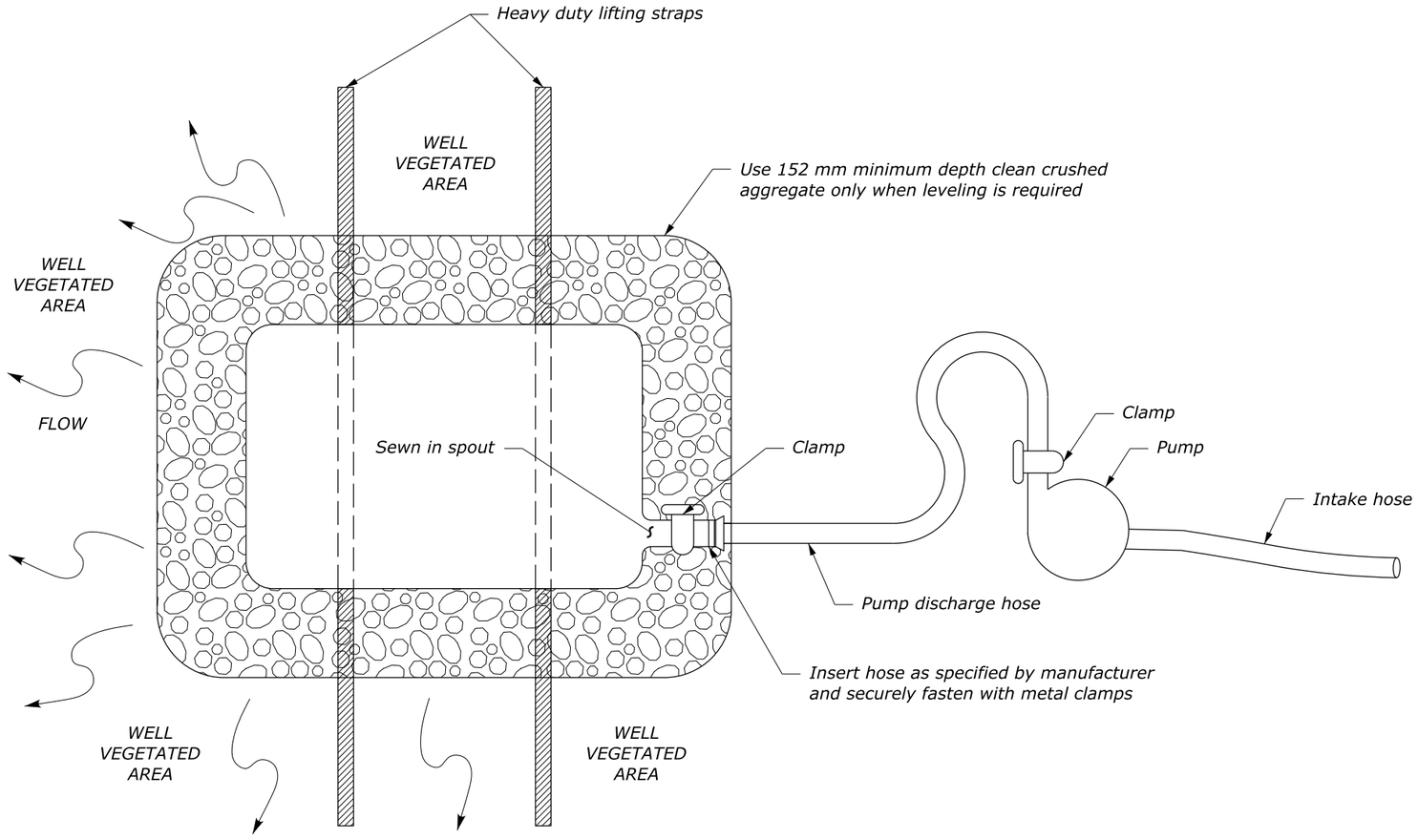
NOTE:

1. Locate bags in level areas (less than 5% grade). When level areas are not available, place geotextile and coarse aggregate to level the bags.
2. Locate bags in approved areas. Discharge onto stable, erosion resistant areas.
3. Locate bags in areas accessible by equipment for maintenance and removal.
4. Insert a maximum of one hose in each bag at any given time.
5. Replace bags when 50% of the sediment capacity has been reached and/or when there is a failure. Have spare bags on site for replacement.
6. Do not cut or empty filter bag onsite.
7. Do not permit discharge from the bags to drain back into work or access areas of the project.

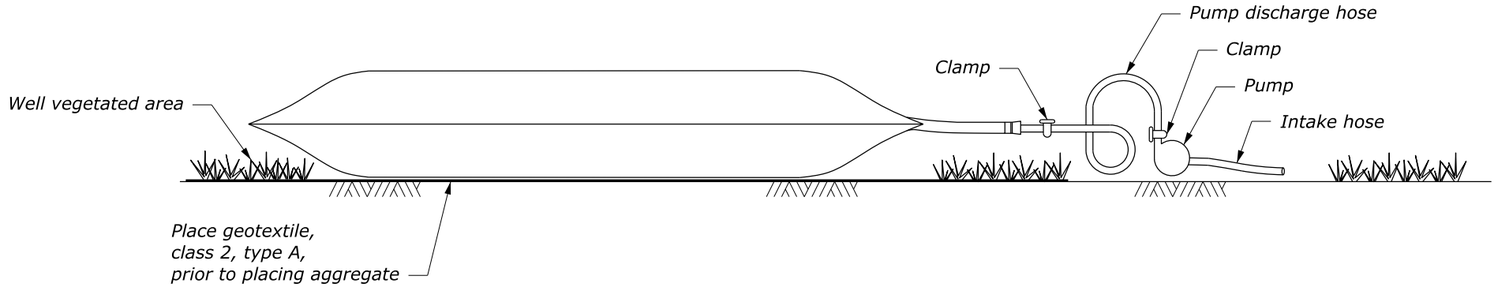
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-18
SEDIMENT FILTER BAG	SPECIFICATION FP-14
	APPROVED FOR USE 10/2016

PROJECT	SHEET NUMBER



PLAN VIEW



ELEVATION VIEW

NOTE:

1. Locate bags in level areas (less than 5% grade). When level areas are not available, place geotextile and coarse aggregate to level the bags.
2. Locate bags in approved areas. Discharge onto stable, erosion resistant areas.
3. Locate bags in areas accessible by equipment for maintenance and removal.
4. Insert a maximum of one hose in each bag at any given time.
5. Replace bags when 50% of the sediment capacity has been reached and/or when there is a failure. Have spare bags on site for replacement.
6. Do not cut or empty filter bag onsite.
7. Do not permit discharge from the bags to drain back into work or access areas of the project.

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

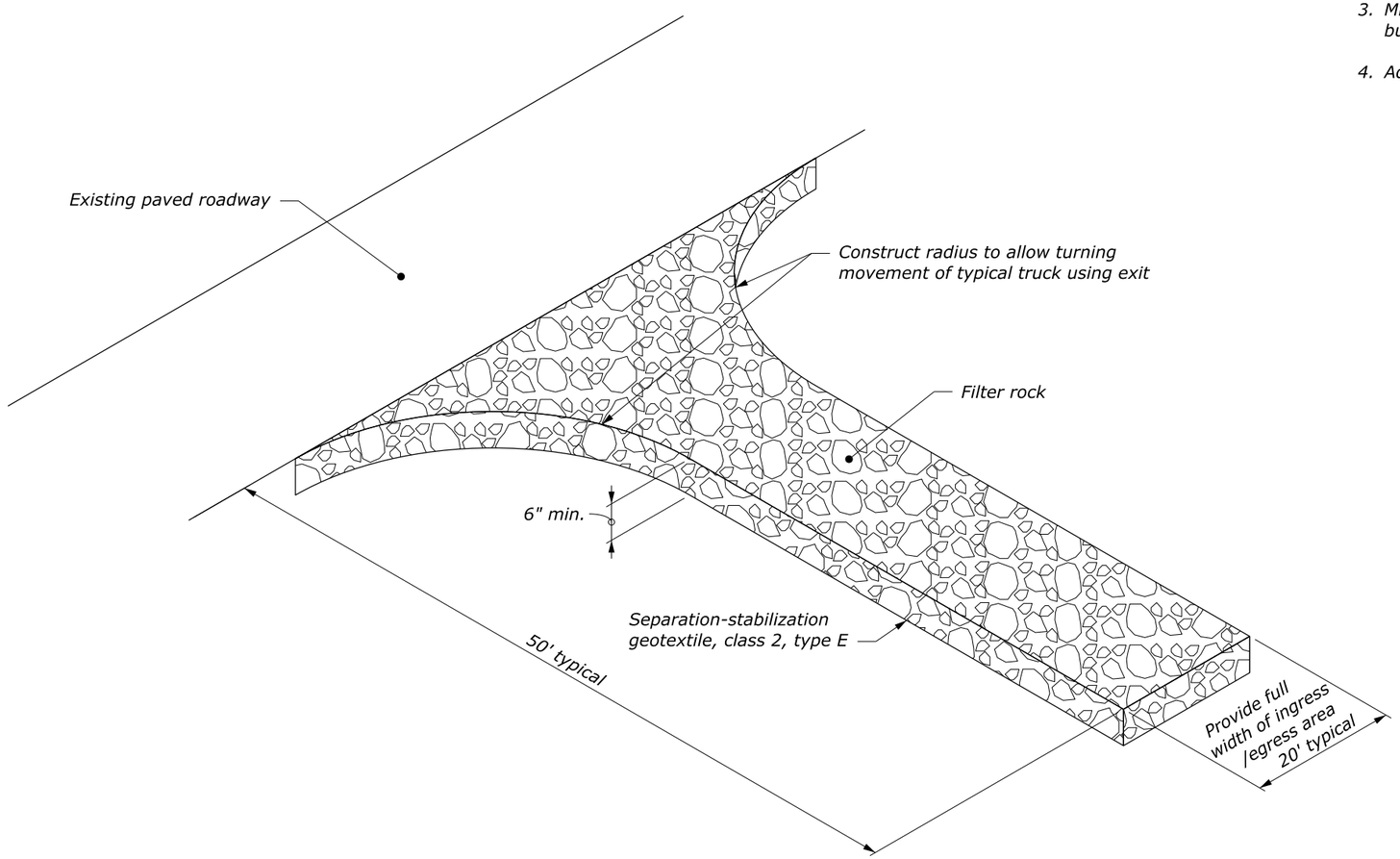
SEDIMENT FILTER BAG

WFL STANDARD
WM157-18
SPECIFICATION
FP-14
APPROVED FOR USE
10/2016

PROJECT	SHEET NUMBER

NOTE:

1. *Use this entrance for construction vehicles only.*
2. *Construct drainage ditches along entrance as directed. Provide temporary drainage culvert where entrance crosses existing drainage ditches.*
3. *Minimize tracking onto paved roadway by removing built up sediment.*
4. *Adjust length to fit field conditions as approved.*



STABILIZED CONSTRUCTION EXIT

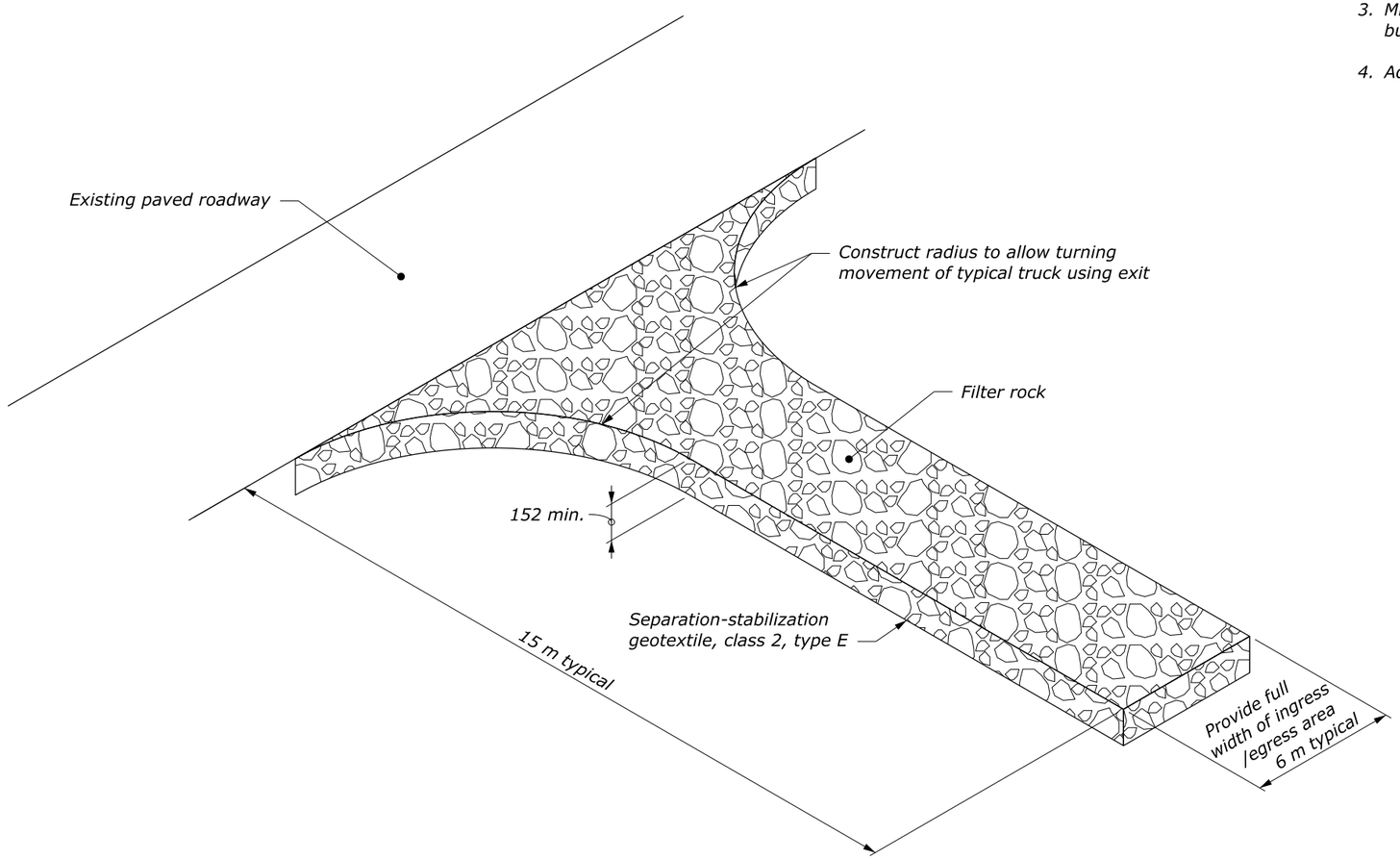
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-19
STABILIZED CONSTRUCTION EXIT	SPECIFICATION FP-14
	APPROVED FOR USE 7/2016

PROJECT	SHEET NUMBER

NOTE:

1. *Use this entrance for construction vehicles only.*
2. *Construct drainage ditches along entrance as directed. Provide temporary drainage culvert where entrance crosses existing drainage ditches.*
3. *Minimize tracking onto paved roadway by removing built up sediment.*
4. *Adjust length to fit field conditions as approved.*



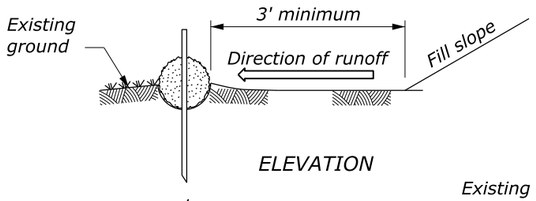
STABILIZED CONSTRUCTION EXIT

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

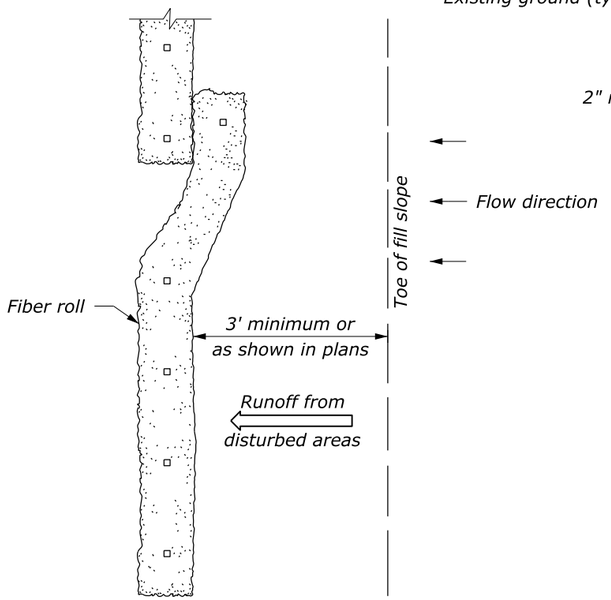
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD WM157-19
STABILIZED CONSTRUCTION EXIT	SPECIFICATION FP-14
	APPROVED FOR USE 7/2016

PROJECT	SHEET NUMBER

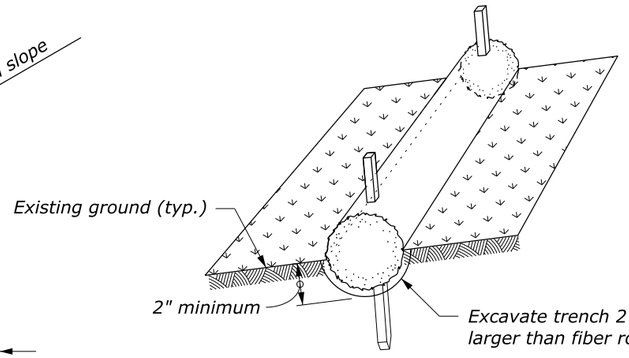


ELEVATION

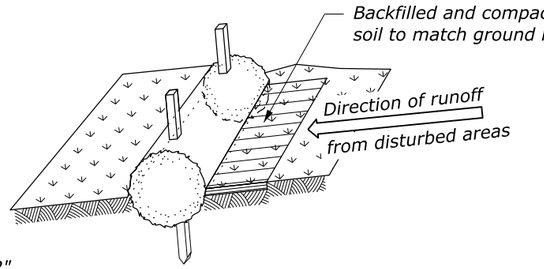


PLAN

INSTALLATION BEYOND TOE OF SLOPE



Step 1: Excavate trench and install fiber rolls



Step 2: Backfill soil against fiber rolls

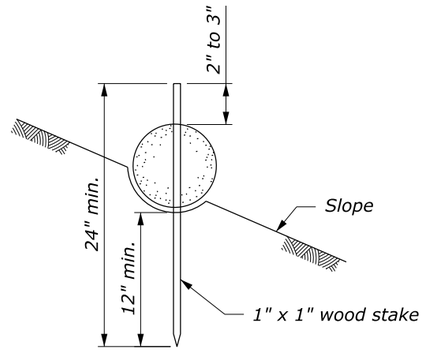
PROPERLY STAKED AND ENTRENCHED FIBER ROLL

FIBER ROLL SPACING	
Slope	Spacing (FT)
1:4 or flatter	40
1:3	30
1:2	20
1:1	10

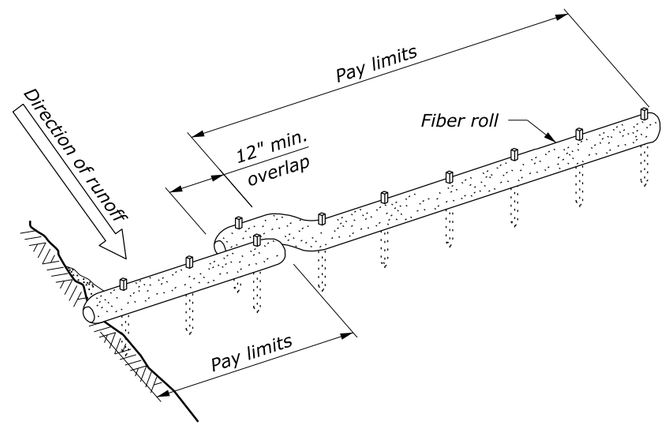
STAKES REQUIRED	
Fiber roll length (FT)	Stakes required for each roll
25	8
20	6
12	4

NOTE:

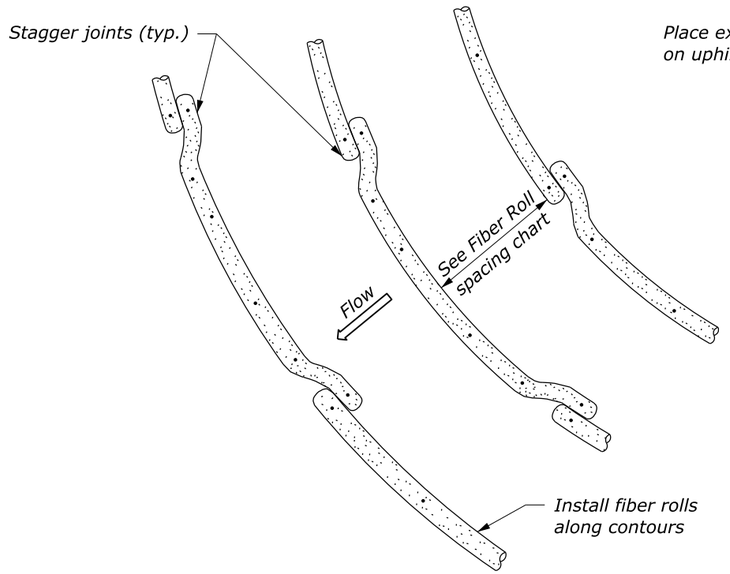
1. Drive stakes at each end and at 4-foot spacing until fiber roll is secure to slope. Live stakes may be used for permanent installations. Do not crush fiber roll while staking.
2. Overlap fiber rolls 12-inch minimum. Drive stakes at 6-inches from fiber roll end angles towards the adjacent fiber roll and space stakes at 4-foot maximum.



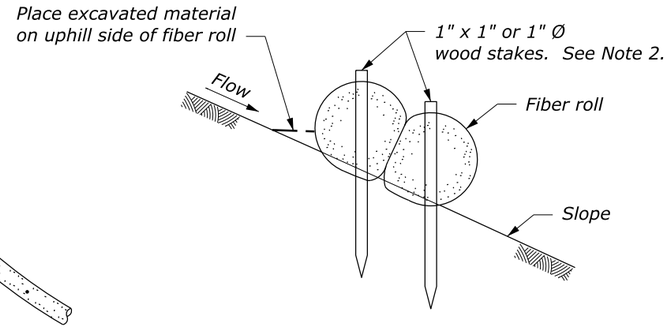
FIBER ROLL STAKING DETAIL



ALTERNATE FIBER ROLL JOINT DETAIL
SLOPE PROTECTION INSTALLATION



INSTALLATION ALONG SLOPES

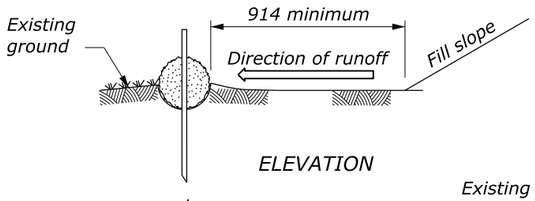


FIBER ROLL LAPPING DETAIL

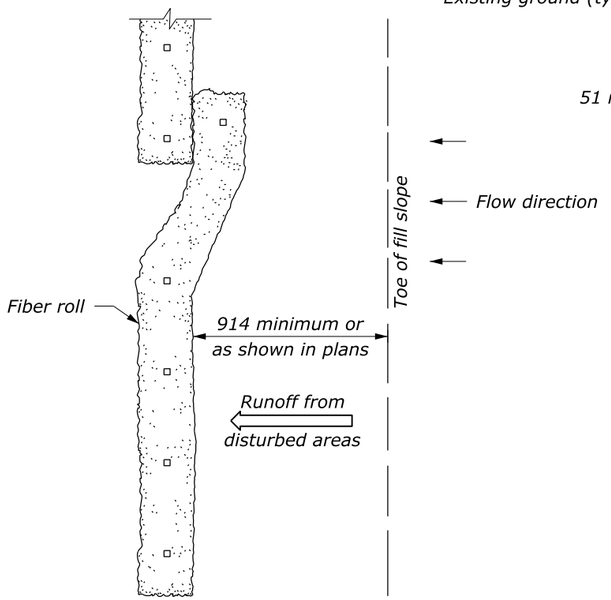
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W157-21
FIBER ROLL	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 7/2016

PROJECT	SHEET NUMBER

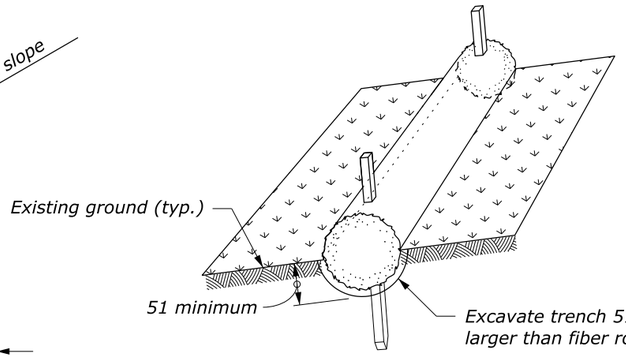


ELEVATION

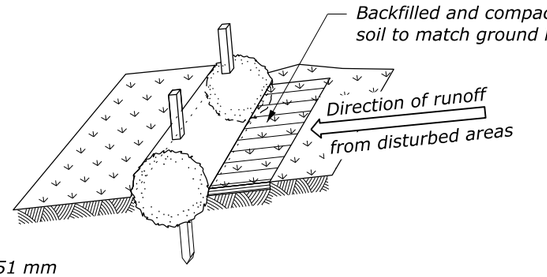


PLAN

INSTALLATION BEYOND TOE OF SLOPE



Step 1: Excavate trench and install fiber rolls



Step 2: Backfill soil against fiber rolls

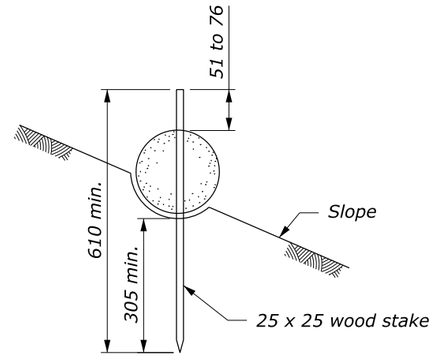
PROPERLY STAKED AND ENTRENCHED FIBER ROLL

FIBER ROLL SPACING	
Slope	Spacing (m)
1:4 or flatter	12
1:3	9
1:2	6
1:1	3

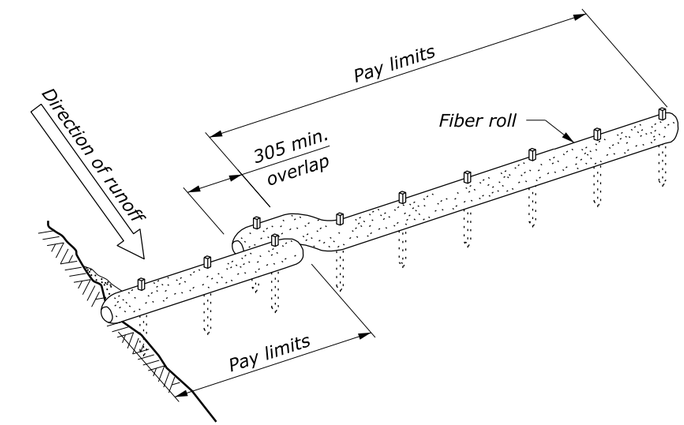
STAKES REQUIRED	
Fiber roll length (m)	Stakes required for each roll
7.6	8
6.1	6
3.7	4

NOTE:

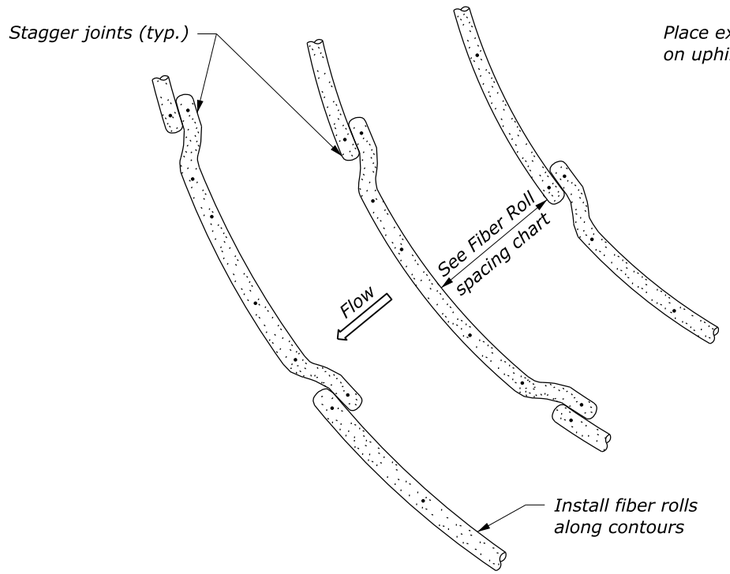
1. Drive stakes at each end and at 1.2 m spacing until fiber roll is secure to slope. Live stakes may be used for permanent installations. Do not crush fiber roll while staking.
2. Overlap fiber rolls 305 mm minimum. Drive stakes at 152 mm from fiber roll end angles towards the adjacent fiber roll and space stakes at 1.2 m maximum.



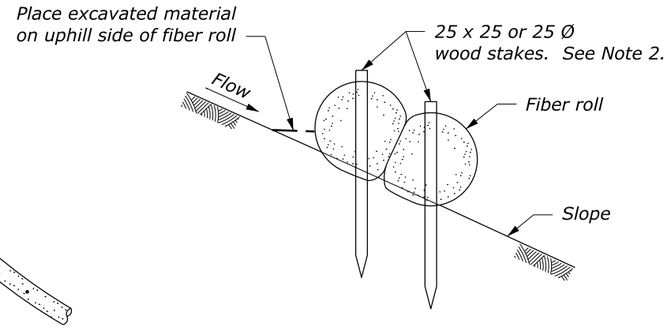
FIBER ROLL STAKING DETAIL



ALTERNATE FIBER ROLL JOINT DETAIL
SLOPE PROTECTION INSTALLATION



INSTALLATION ALONG SLOPES



FIBER ROLL LAPPING DETAIL

*This drawing contains **Metric** units of measure. Dimensions without units are millimeters.*

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD WM157-21
FIBER ROLL	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 7/2016